

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for controlling the flowability of polymer particles ~~flowing downward in a densified form inside a polymerization reactor, in which one or more monomers are gas phase polymerized in the presence of a polymerization catalyst, the density of solid (Kg of polymer per m³ of reactor occupied by the polymer) being higher than 80% of the "poured bulk density" of the polymer, the method being characterized in that a liquid stream is continuously fed into the polymerization reactor at a mass flow rate per unity of reactor surface higher than 30 Kg/h m² comprising:~~
feeding a liquid stream continuously into a polymerization reactor comprising a polymer bed at a mass flow rate per unity of reactor surface higher than 30 Kg/h-m²,
wherein the polymer particles comprise a polymer and a density of solid higher than 80% of a poured bulk density of the polymer, where the density of solid is the Kg of polymer per m³ of reactor occupied by the polymer, and the polymer particles flow downward in a densified form inside the polymerization reactor, wherein at least one monomer is gas phase polymerized in the presence of a polymerization catalyst, the monomer comprising fresh monomers.
2. (currently amended) The method according to claim 1, wherein said liquid stream is fed at a mass flow rate per unity of reactor surface in the range from 50 to 200 Kg/h m².
3. (currently amended) The method according to ~~any of claims 1-2~~claim 1, wherein said liquid stream is obtained from the condensation of a part of the fresh monomers ~~to be polymerized~~.
4. (currently amended) The method according to ~~any of claims 1-2~~claim 1, wherein said liquid stream ~~comes from the~~is obtained from cooling and condensation of ~~the~~a recycle gas stream.
5. (currently amended) The method according to claim 4, wherein said liquid stream ~~contains, besides~~comprises the at least one monomer and the monomers to be polymerised, also condensable inert compounds[[,]] selected from aliphatic hydrocarbons C₂-C₈.
6. (currently amended) The method according to ~~any of claims 1-5~~claim 1, wherein the feeding of said liquid stream is equally distributed along the reactor by ~~means of more~~at least one feeding line, the number of said feeding lines being an integer ~~equal or higher than~~at least equal to 0.2xH, where H is the height (~~expressed in meters~~) of the polymer bed ~~inside the reactor~~.

7. (currently amended) The method according to claim 1, wherein said ~~one or more monomers are α -olefins~~ at least one monomer is an α -olefin of formula $\text{CH}_2=\text{CHR}$, where R is hydrogen or a hydrocarbon radical having 1-12 carbon atoms.
8. (currently amended) The method according to ~~any of claims 1-7~~ claim 7, wherein said α -olefins are gas-phase polymerized in a first polymerization zone and ~~in a second polymerization zone comprising a polymer bed, the first and second polymerization zones being interconnected~~ inter-connected polymerization zones, where the ~~growing~~ polymer particles flow through the first of ~~said polymerization zones~~ zone under fast fluidization conditions, leave said first polymerization zone and enter the second of ~~said polymerization zones~~ zone through which they flow downward in a densified form, leave said second polymerization zone and are reintroduced into said first polymerization zone, thus establishing a circulation of polymer between said two polymerization zones.
9. (currently amended) The method according to ~~any of claims 1-8~~ claim 8, wherein said liquid stream is continuously fed into said second polymerization zone.
10. (currently amended) The method according to ~~any of claims 8-9~~ claim 9, wherein the feeding of said liquid stream is equally distributed along the height of said second polymerization zone by ~~means of more feeding lines~~ at least one feeding line, the number of said feeding lines being an integer ~~equal or higher than~~ at least equal to $0.2 \times H$, where H is the height (expressed in meters) of the second polymerization zone polymer bed ~~inside said second polymerization zone~~.